
Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

Mule-Hide Helix® - Part B (Tanks)

Synonyms

Urethane System Resin Component

Chemical Family

Resin

Product Use

Polyurethane Component, Industrial Chemicals

Restrictions on Use

Suitable for use in industrial sector: Polymers Industry, Chemical Industry

The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Manufacturer Information:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Phone: 973-245-6000

Emergency Phone #:

CHEMTREC: 800-424-9300

BASF HOTLINE: 800-832-4357

Supplier Information:

Mule-Hide Products Co., Inc
1195 Prince Hall Dr.
Beloit, WI 53511, USA

Phone: 800-786-1492

Section 2 - HAZARDS IDENTIFICATION

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR 1910.1200**Classification of the product**

Press. Gas
STOT RE

Compr. Gas
2 (oral)

Gases Under Pressure
Specific target organ toxicity-
repeated exposure

Simple Asphyxiant

Simple Asphyxiant (1)

Simple Asphyxiant

GHS Label Elements**Symbol(s)**

Signal Word

Warning

Hazard Statement(s)

H280 Contains gas under pressure; may explode if heated.
May displace oxygen and cause rapid suffocation.

H373 May cause damage to organs (Kidney) through
prolonged or repeated exposure (oral).

Precautionary Statement(s)**Prevention**

P260 Do not breathe dust/gas/mist/vapours.

Response

P314 Get medical advice/attention if you feel unwell.

Storage

P410 + P403 Protect from sunlight. Store in well-ventilated place.

Disposal

P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical Name</u>
811-97-2	> = 10.0 - < 15.0%	HFC-134A
111-46-6	> = 1.0 - < 3.0%	diethylene glycol
280-57-9	> = 0.3 - < 1.0%	triethylenediamine
25265-71-8	> = 1.0 - < 3.0%	dipropylene glycol

The product contains:

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical Name</u>
	> = 0.0 - < 1.0%	Nitrogen, used for cylinder pressurization only.

Section 4 - FIRST AID MEASURES

Description of first aid measures**General advice:**

Remove contaminated clothing.

If Inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Wash thoroughly with soap and water.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.

Hazards: No hazards anticipated.

Indication of any immediate medical attention and special treatment neededNote to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: water spray, dry powder, carbon dioxide, foam

Special hazards arising from substance or mixture:

Hazards during fire-fighting: No particular hazards known.

Advice for fire-fighters

Protective equipment for fire-fighting: Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Section 6 - ACCIDENTAL RELEASE MEASURES

Further accidental release measures:

High risk of slipping due to leakage/spillage of product.

Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective clothing.

Environmental Precautions Do not empty into drains. Do not discharge into the subsoil/soil.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Ensure thorough ventilation of stores and work areas. Protect against moisture.

Protection against fire and explosion: No explosion proofing necessary.

Conditions for Safe Storage, Including any Incompatibilities

Segregate from foods and animal feeds. Segregate from acids. Segregate from oxidants.

Suitable materials for containers: Carbon steel (Iron), High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4301 (V2)

Further information on storage conditions: No special precautions necessary. Avoid extreme heat. Store protected against freezing.

Storage stability:

Storage temperature: 16 - 27 °C

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

No occupational exposure limits known.

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment**Respiratory protection:**

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:

Chemical resistant protective gloves.

Eye protection:

Wear face shield or tightly fitting goggles (chemical goggles) if splashing hazard exists.

Body protection:

Standard work clothes and shoes.

General safety and hygiene measures

Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapours/mists. Wash soiled clothing immediately.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid
Odour:	amine-like
Odour threshold:	No applicable information available.
Colour:	clear
pH value:	≥ 7.0
Freezing point:	$> 0.00\text{ }^{\circ}\text{C}$
Boiling point:	$> 100.00\text{ }^{\circ}\text{C}$
Sublimation point:	No applicable information available. $>$
Flash point:	$200.00\text{ }^{\circ}\text{F}$ (closed cup)
Flammability:	not flammable
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be $5 - 15\text{ }^{\circ}\text{C}$ below the flash point.
Upper explosion limit:	For liquids not relevant for classification and labelling.
Autoignition:	$> 250\text{ }^{\circ}\text{C}$
Vapour pressure:	$< 0.1\text{ hPa}$ ($25\text{ }^{\circ}\text{C}$)
Density:	$1.0010 - 1.0040\text{ g/cm}^3$ ($20.00\text{ }^{\circ}\text{C}$)
Relative density:	No applicable information available.
Vapour density:	No applicable information available.
Partitioning coefficient n-octanol/water (log Pow):	Unspecified
Self-ignition temperature:	Not self-igniting
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	$420.000\text{ mPa}\cdot\text{s}$ ($23.00\text{ }^{\circ}\text{C}$)
Viscosity, kinematic:	No applicable information available.
Solubility in water:	Slightly soluble.
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.

Other Information

If necessary, information on other physical and chemical parameters is indicated in this section.

Section 10 - STABILITY AND REACTIVITY

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No Corrosive effect on metal. expected.

Oxidizing properties:

Not an oxidizer.

Chemical Stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid

Temperature: < 0 degrees Celsius

Incompatible materials

acids, oxidizing agents, isocyanates

Hazardous decomposition products

Decomposition products

Hazardous decomposition products: carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen cyanide

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

Section 11 - TOXICOLOGICAL INFORMATION

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/EffectsAcute toxicity

Assessment of acute toxicity: No known acute effects.

Oral

No applicable information available.

Inhalation

No applicable information available.

Dermal

No applicable information available.

Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Origin of data: expert judgement

Irritation/Corrosion

Assessment of irritating effects: No irritation is expected under intended use and appropriate handling.

Sensitization

Assessment of sensitization: The chemical structure does not suggest a sensitizing effect. No applicable information available.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/EffectsRepeated dose toxicity

Assessment of repeated dose toxicity: Repeated exposure may affect certain organs.

Genetic toxicity

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Reproductive toxicity

Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Teratogenicity

Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Other Information

The product has not been tested. The statement has been derived from the properties of the individual components.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Medical conditions aggravated by overexposure

Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

Section 12 - ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Poorly biodegradable.

Elimination information

Poorly biodegradable.

Bioaccumulative Potential

Assessment bioaccumulation potential

Does not significantly accumulate in organisms.

Mobility in soil

Assessment transport between environmental compartments

Adsorption to solid soil phase is not expected.

Additional information

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen

Other ecotoxicological advice:

The product has not been tested. Do not discharge product into the environment without control.

Section 13 - DISPOSAL CONSIDERATIONS

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Container disposal:

CYLINDERS:

Return to the manufacturer with residual pressure. If cylinder is damaged, please contact supplier. Empty cylinders (all sizes) must be depressurized before they are returned to supplier. Depressurization will not relieve all pressure. Always seal cylinder valves for return.

Section 14 - TRANSPORT INFORMATION

Containers Greater Than 100 cu. Cm. (1 liter)

Ground - UN3500 chemical Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen)
2.2 (Non-Flammable Gas Label)

Air - UN3500 chemical Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen)
2.2 (Non-Flammable Gas Label)

Water - UN3500 chemical Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen)
2.2 (Non-Flammable Gas Label)

Section 15 - REGULATORY INFORMATION

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Acute; Chronic, Sudden release of pressure

State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical Name</u>
PA	111-46-6	diethylene glycol
	25265-71-8	dipropylene glycol

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 1 Special:

HMIS III rating:

Health: 1[□] Flammability: 1 Physical hazard: 1

Section 16 - OTHER INFORMATION

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2016/05/01

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We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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END OF DATA SHEET